

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001313**Date Inspected:** 04-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** Lift 4 East, Office, Lift 3 East, Lift 1 East, Lift**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**Office**

Review and sign backlog of project documentation and notice of inspection documents at ABF satellite office.

**Lift 4 East**

East Side Plate Final Finish coat to amend Incident report, entire surface was re-abrasive blasted to remove the previously applied coating system as the Dry Film Thickness (DFT) and uniformity of the previously applied coating system was non-compliant. ZPMC personnel performed required repairs aboard transport ship #17. The DFT range was between 180-250um when checked in accordance with SSPC PA-2.

**Lift 3 East**

Final Inspection requested for Internal Undercoated surfaces of Interzinc 22 aboard the transport ship. Side Plates and Bottom Plate as well as the Upper corner Units were inspected and found to be incomplete and additional work is required.

**Lift 1 East**

Internal surface of the Longitudinal Diaphragm connection assembly which runs from the Bottom Plate to the Top plate was re-abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied. Profile amplitude was 80-84um.

**Lift 2 East**

External surfaces of affixed Traveler Rail Bracket and adjacent area of the Side Plate and Drip Edge and the "F"

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## SOURCE INSPECTION REPORT

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Side plate were re-abrasive blasted to Base metal and an SSPC SP-10 condition and Interzinc 22 re-applied. This was performed on the West Side Plate adjacent to the FL-3 beams. Also the East Side Plate area along the Transverse Weld Seam was re-abrasive Blasted to Base Metal and an SSPC SP-10 condition and Interzinc 22 re-applied at the external side along Panel Point #16 to repair damages incurred from Ultrasonic Testing of the weld.

### Lift 2 West

External surfaces of affixed Traveler Rail Bracket and adjacent area of the Side Plate and Drip Edge and the "F" Side plate were re-abrasive blasted to Base metal and an SSPC SP-10 condition and Interzinc 22 re-applied. This was performed on the East Side Plate adjacent to the FL-3 beams.

### Lift 3 East

Internal "Final" inspection requested by ZPMC. Undercoated surfaces of Interzinc 22 were re-inspected and repairs are incomplete. ZPMC personnel were in process of performing repairs such as dry-spray removal, holiday remediation, cleaning, and build up DFT in low DFT areas to comply with contract requirements.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

Caltrans QA Lumley inquired with ABF QA Bill Oak as to quantity of re-inspections required for "Final" and incompleted repairs.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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